PB-244 926

PUBLIC HEARING REGARDING 180-DAY NOTICE TO THE HOLLY SUGAR COMPANY OF VIOLATION OF STATE AND FEDERAL WATER QUALITY STANDARDS FOR THE INTERSTATE WATERS OF THE NORTH PLATTE RIVER HELD AT SCOTTS-BLUFF, NEBRASKA ON 21 JULY 1971

Environmental Protection Agency
Kansas City, Missouri

July 1971

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PUBLIC HEARING

regarding 180-day notice to the

Holly Sugar Company

of violation of

State and Federal Water Quality Standards

for the Interstate Waters of the

North Platte River

held in

Scottsbluff, Nebraska

July 21, 1971

TRANSCRIPT OF PROCEEDINGS

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KANSAS CITY, MISSOURI 64138

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Virginia Hough Rankin, CSR

A public hearing regarding 180-day notice to the Holly Sugar Company of Torrington, Wyoming, of violation of State and Federal water quality standards for the interstate waters of the North Platte River convened at 9 o'clock on July 21, 1971, at the Public Library, Scottsbluff, Nebraska.

PRESIDING:

Patrick K. Monahan, Chief
Enforcement Branch, Region VII
U. S. Environmental Protection Agency
Kansas City, Missouri

PARTICIPANTS:

Robert L. Markey, Director
Division of Enforcement, Region VII
U. S. Environmental Protection Agency
Kansas City, Missouri

Thomas O. Dahl, Sanitary Engineer
Division of Enforcement, Region VII
U. S. Environmental Protection Agency
Kansas City, Missouri

C. W. Miles, Jr.
Vice President and General Superintendent
Holly Sugar Corporation

John Evans
Holly Sugar Corporation
Colorado Springs, Colorado

A. E. Williamson
State Health Department
Cheyenne, Wyoming

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PARTICIPANTS (Continued):

Claude R. Starr
State of Nebraska Environmental Control
Water Pollution Section, Lincoln, Nebraska

ATTENDEES:

Randall S. Jessee
U. S. Environmental Protection Agency
Kansas City, Missouri

David Vietti
U. S. Environmental Protection Agency
Kansas City, Missouri

Christopher M. Timm
U. S. Environmental Protection Agency
Denver, Colorado

Irwin L. Dickstein
U. S. Environmental Protection Agency
Denver, Colorado

Walter L. Redmon
U. S. Environmental Protection Agency
Kansas City, Missouri

J. P. Manhart
U. S. Environmental Protection Agency
Kansas City, Missouri

Vicki Zimmer
Torrington Telegram
Torrington, Wyoming

Steven L. Pitcher
Nebraska Department of Environmental Control
Lincoln, Nebraska

Frank R. Harman
Wyoming Department of Health
Cheyenne, Wyoming

L. Orin Mills
Radio KGOS
Torrington, Wyoming

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ATTENDEES (Continued):

E. A. Edwards
Holly Sugar Corporation
Torrington, Wyoming

J. E. A. Rich
Holly Sugar Corporation
Colorado Springs, Colorado

W. G. Vanderpool
Wyoming State Senator
Torrington, Wyoming

Bob Curry
Beet grower
Veteran, Wyoming

Harold L. Brethow
President, Chamber of Commerce
Torrington, Wyoming

John C. Simons
Wyoming State Representative
Torrington, Wyoming

Lawrence Gibbs
Private Citizen
Scottsbluff, Nebraska

Gary Drown
KOLT
Scottsbluff, Nebraska

Oscar Wiberg (Retired)
Scottsbluff County Health Department
Scottsbluff, Nebraska

J. Kelley Vandel
Holly Sugar Corporation
Torrington, Wyoming

O. P. Kottwiz
Torrington, Wyoming

Virginia Hough Rankin, CSR

ATTENDEES (Continued):

W. A. Gibson
Chairman, Wyoming State Stream
Pollution Advisory Council
Torrington, Wyoming

Robert E. Cox
Board Member
Nebraska Environmental Control Council
Scottsbluff, Nebraska

John L. Schmidt
Scottsbluff Star-Herald
Scottsbluff, Nebraska

Ray Wellman
Scottsbluff, Nebraska

Ken Kluherz
Torrington, Wyoming

C. H. Brown, Jr.
Torrington, Wyoming

- - -

Virginia Hough Rankin, CSR

P R O C E E D I N G S

MR. MONAHAN: The hearing is now open.

I think everybody knows why we are here, as the result of a 180-day notice sent to the Holly Sugar Company. I understand the States of Nebraska and Wyoming are represented. We would like to have them up here at the head table.

Mr. Starr. I see Mr. Williamson is here. We would like to have Holly Sugar Company come up, too, if they desire.

My name is Patrick Monahan. I am Chief of the Enforcement Branch, Region VII, Environmental Protection Agency, Kansas City, Missouri.

I think we should introduce ourselves around the table here. Start with Holly Sugar Company.

MR. MILES: I am George Miles.

MR. EVANS: John Evans.

MR. MARKEY: I am Robert Markey, Chief of the Enforcement Division, Kansas City, Missouri, EPA.

MR. DAHL: I am Tom Dahl, in the Enforcement Division out of Kansas City.

MR. WILLIAMSON: A. E. Williamson, State Health Department, Wyoming.

MR. STARR: Claude R. Starr, Department of Environmental Control, Water Pollution Control Section, Lincoln, Nebraska.

Introductions

MR. MONAHAN: Are there any other representatives of the States or Federal Government here who would like to be acknowledged?

Any elected officials here today?

Yes, sir.

MR. SIMONS: John Simons, State Representative from Goshen County, Wyoming.

MR. MONAHAN: Glad to have you here, Mr. Simons.

SENATOR VANDERPOOL: I am Wayne Vanderpool, Senator from Goshen County.

MR. MONAHAN: Senator Vanderpool.

I have an opening statement which I have reduced to writing. I will read through it. My remarks will be essentially what is in the short statement here.

I will hand a copy of this to the court reporter so she can mark it as Exhibit A and incorporate it in the record. I also have a copy of this for anybody who would like to have one.

(The Opening Statement by Mr. Patrick K. Monahan was marked as Exhibit A.)

MR. MONAHAN: I will read through this. It is not long.

The Administrator of the Environmental Protection

Agency is charged by law with specific responsibilities in the field of water pollution control. The Federal Water Pollution Control Act provides that the discharge of matter into interstate waters or portions thereof which reduces the quality of such waters below the water quality standards established by law is subject to abatement as provided in the Federal Act. This applies whether the matter causing or contributing to such reduction of water quality is discharged directly into such waters or reaches such waters after discharge into a tributary.

Pursuant to Section 10(c)(5) of the Federal Water Pollution Control Act and applicable regulations published in the Federal Register, the Administrator of the EPA, William D. Ruckelshaus, on June 15, 1971, sent a letter to the Holly Sugar Corporation in Torrington, Wyoming, notifying the company that its operations located on and discharging effluent into the North Platte River are responsible for violation of the established State and Federal water quality standards for the interstate waters of the North Platte River. Administrator Ruckelshaus' letter constitutes a 180-day notification of the violation of the established water quality standards.

At this informal hearing we will discuss the alleged violations with the Holly Suga. Corporation, outline the pollution problems and ascertain what appropriate remedial action

may be taken on a voluntary basis. This is not an adversary proceeding today.

If this matter is not satisfactorily resolved within 180 days from June 15, 1971, the date of the 180-day notice, an abatement action may be brought against Holly Sugar by the United States pursuant to Section 10(g) of the Federal Water Pollution Control Act. Additionally, in the event that satisfactory arrangements for abatement of pollution cannot be established through the informal hearing procedures, this agency may also consider action under the Rivers and Harbors Act of 1899 (33 U.S.C. 407)(Refuse Act) prior to expiration of the 180-day period.

When we say take action under these two particular laws, we mean that our agency would defer it to the particular United States Attorney's Office for his consideration as to any court action, Federal court action.

A record and verbatim transcript of this meeting is being made by Mrs. Virginia Rankin, so that we may have a complete record of what is said here. This record will not be published, but will be available for inspection in the EPA's Regional Office in Kansas City and in Washington, D. C., during normal business hours, and if anyone else wants a copy of the transcript, either in whole or in part, you should make your

arrangements with Mrs. Rankin. The transcript, of course, is open to all.

The parties to the hearing are the Federal Government, represented by the Environmental Protection Agency, and the Holly Sugar Corporation. We have also asked both interested States concerned to participate. Should anyone else here desire to make a statement, they will be given a chance to do so. We do request, though, that this statement be in writing. This record will be held open 10 calendar days after the close of this hearing in order to receive any written statements. These statements should be sent to our office in Kansas City, Missouri. We will forward them to Mrs. Rankin, since she is also from Kansas City. I think that is the best way to handle it.

We have had our introductions. We will have one witness, Mr. Tom Dahl, who is a Sanitary Engineer with the Environmental Protection Agency, Kansas City. He also has a prepared statement and I call upon him at this time to tell us about it.

Tom.

THOMAS O. DAHL

SANITARY ENGINEER, ENFORCEMENT DIVISION

U. S. ENVIRONMENTAL PROTECTION AGENCY

KANSAS CITY, MISSOURI

MR. DAHL: Thank you, Mr. Chairman.

I have a copy of my statement here, Mr. Chairman.

MR. MONAHAN: Yes, I will hand this to the reporter at this time. She can mark it as Exhibit B and incorporate it with the record.

(The statement by Mr. Thomas O. Dahl was marked Exhibit B.)

MR. DAHL: Ladies and gentlemen, I have the Federal statement to this hearing. During the period of December 4 through 9, 1970, the Environmental Protection Agency conducted a water quality investigation of the North Platte River from Torrington, Wyoming, to Henry, Nebraska, a distance of approximately 10 miles. The purpose of this hearing is to discuss the results of the study as it related to discharges by the Holly Sugar Corporation of Torrington, Wyoming, and violations of applicable Federal laws.

In order to best understand the present situation, I will first summarize past Federal involvement in this area.

On September 12, 1961, and again on March 21, 1962,

and November 20, 1963, Federal-State conferences on Pollution of the Interstate Waters of the North Platte River, Wyoming-Nebraska, were convened in Scottsbluff, Nebraska. During this time period, water quality studies were conducted to delineate levels of pollution and measures to be taken by the industries and municipalities involved to abate the pollution of the North Platte River. During the November 20, 1963, conference, it was pointed out that the Holly Sugar Corporation at Torrington, Wyoming, had "taken the remedial action previously recommended by the conferees" in the March 21, 1962, session. That is, Holly Sugar had provided "for disposal of sewage and industrial wastes in order to keep out of the river, pulp screenings, silo drainage, and septic tank discharges and (had)...devise(d) a method for efficient screening of final waste effluent." It should be noted that this recommendation did not specify any additional waste treatment other than screening for the beet transport water.

On December 19, 1968, the Secretary of the Interior approved the State of Nebraska's Water Quality Standards which specified the following total and fecal coliform criteria for the Nebraska portion of the North Platte River downstream from the Holly Sugar Corporation's outfall: "Coliform group and fecal coliform organisms shall not exceed a geometric mean

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10,000 total or 2,000 fecal coliform bacteria per 100 ml, based on at least 5 samples per 30-day period." As will be demonstrated in this presentation, Holly Sugar Corporation has caused violations of these criteria.

In December 1970, the United States Environmental Protection Agency conducted a water quality investigation to determine Holly Sugar Corporation's influence on the water quality of the North Platte River. Seven sampling stations were utilized.

Station descriptions as well as a summary of the microbiological data will be included in the written text of these proceedings. In addition, all chemistry and microbiological data are to be included in the text.

At this time could I have that side over there.

FROM THE AUDIENCE: Could you talk louder?

MR. DAHL: O. K.

Station NP-1 at River Mile 209.3 reflected water quality upstream from all sources of waste considered in the study. Resulting geometric mean total and fecal coliform densities of 59/100 ml and 21/100 ml respectively reflected high quality water from a bacteriological standpoint.

Between the control stations NP-1 and NP-7, the only waste discharges, as verified by a reconnaissance of the entire reach, were Holly Sugar Corporation's discharge of beet

transport and condenser waters, just downstream from the Highway 85 bridge, at River Mile 208.8 with an average flow of 5.9 million gallons per day, right here (indicating), and a minor discharge of .08 MGD from the city of Torrington, Wyoming's sewage treatment lagoon system at River Mile 207.2. Geometric mean total and fecal coliform densities discharged by Holly Sugar Corporation were 370,000/100 ml and 42,000/100 ml respectively. The Torrington lagoon system contributed wastes with geometric mean total and fecal coliform densities of 7,800/100 ml and 690/100 ml respectively.

Two agricultural drains, Cherry Creek with a flow of 7.8 MGD and Katzer with a flow of 10.9 MGD enter the North Platte at River Mile 206.9 and 200.3 respectively. Inflows from Cherry Creek contained geometric mean total and fecal coliform densities of 130/100 ml and 76/100 ml, while Katzer Drain contributed densities of 280/100 ml and 170/100 ml respectively.

During the survey, these four discharges combined (i.e. Holly Sugar, Torrington lagoons, and Cherry Creek and Katzer Drains) contributed 8.3×10^{13} total coli/day and 9.4×10^{12} fecal coliforms/day to the North Platte River. Of these coliform organisms, Holly Sugar Corporation accounted for 460 times as many total coliforms and 110 times as many fecal

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coliforms as the other three inflows combined.

Station NP-7 at State Highway Connection 92 in Henry, Nebraska, River Mile 199.0, reflected water quality downstream from all sources of waste considered in the study. Resulting geometric mean total and fecal coliform densities recorded during the December 4-9, 1970, survey were 15,000/100 ml and 5,000/100 ml respectively. These densities demonstrate a clear violation of the 10,000/100 ml total and 2,000/100 ml fecal coliform criteria established on the North Platte River by Nebraska's water quality standards. As shown previously, Holly Sugar Corporation is by far the major contributor to violations of these water quality standards.

Cut the slides there.

In addition to causing violations of the established Federal-State water quality standards, Holly Sugar is also in violation of the Rivers and Harbors Act of 1899 (33 U.S. Code 407).

This act specifically prohibits the discharge of refuse matter directly or indirectly to navigable waters without a permit from the U. S. Army Corps of Engineers. Section 13 of the act makes it unlawful to discharge from any '...manufacturing establishment, or mill of any kind, any refuse matter of any description whatever other than that flowing from

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streets and sewers and passing therefrom in a liquid state, into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such navigable water..." provided that a discharge may be permitted under certain conditions specified by the Corps of Engineers. "Refuse matter" as defined by the courts includes industrial waste and covers "all foreign substances and pollutants" except for municipal sewage. Hence any unpermitted discharge of industrial wastes constitutes a violation of the Rivers and Harbors Act. Historically, only five such permits were ever issued--none of which was to Holly Sugar Corporation.

Executive Order No. 11574, signed by President Nixon on December 23, 1970, requires that all sources of industrial wastes discharging directly or indirectly to navigable waters must apply to the Corps of Engineers for permits to continue such discharges. The Environmental Protection Agency has been delegated primary Federal responsibility in water quality considerations on permit applications. We have not approved the issuance of a permit to Holly Sugar Corporation. The Holly Sugar Corporation is, therefore, in violation of the 1899 Rivers and Harbors Act because it is discharging refuse without a permit, and as such is liable for prosecution by the

government to seek relief through injunctive or criminal proceedings.

In summary, the United States Environmental Protection Agency has demonstrated Holly Sugar Corporation is in violation of:

1. The Federal Water Pollution Control Act as it relates to violation of established Federal-State water quality standards, and

2. The Rivers and Harbors Act of 1899.

The United States Environmental Protection Agency recommends that the company take the following steps to abate their pollution of the North Platte River:

1. Interim system prior to startup of the 1971-72 Sugar Beet Campaign.

A. Separate condenser and transport systems.

B. Install a closed loop system for recycle of transport waters. Any waters discharged from this system to the North Platte River should not exceed daily average effluent concentrations of 30 mg/l BOD_5 and suspended solids with no grab sample to exceed 50 mg/l.

C. Interim provisions will allow separated condenser waters to be discharged directly to the North Platte River.

2. Complete system by start of 1972-73 Sugar Beet Campaign.

A. Transport waters recycled via clarifier system. Solids recovered from clarifier should be dewatered and disposed of in a manner which will not create odor problems. Any supernatant from sludge dewatering should be returned to recycle system or treated to effluent concentrations not to exceed a daily average of 30 mg/l BOD_5 and suspended solids with no grab sample to exceed 50 mg/l if discharged.

Any buildup (i.e. excess water) water generated in the transport water recycle system, as well as contents of the system at the end of the campaign, should receive whatever treatment is necessary to produce an effluent

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concentration not to exceed a daily average of 30 mg/l BOD_5 and suspended solids with no grab sample to exceed 50 mg/l prior to discharge to the North Platte River.

B. Condenser water recycled via cooling device. Any discharge from this system to the North Platte should not exceed a daily average effluent concentration of 10 mg/l BOD_5 and suspended solids with no grab sample to exceed 20 mg/l.

C. Any wastewater discharge from the system, with the exception of uncontaminated cooling waters, should be effectively disinfected to assure compliance with applicable water quality standards.

This concludes our statement, Mr. Chairman.

(The following data is attached to Exhibit B:)

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STATION DESCRIPTIONS

WATER QUALITY INVESTIGATION (Dec. 4-9, 1970)

NORTH PLATTE RIVER

1. NP-1 (R.M. 209.3) North Platte River near dam at Pioneer Park, 0.5 miles upstream from Highway 85 bridge at Torrington, Wyoming (control station).
2. H.S.-2 (R.M. 208.8) Holly Sugar Corporation outfall at S.E. edge of Highway 85 bridge, Torrington, Wyoming.
3. NP-3 (R.M. 207.8) North Platte River approximately one mile downstream from Highway 85 bridge, just upstream from Torrington lagoons.
4. T.L.-4 (R.M. 207.2) Effluent from Torrington lagoon system.
5. CC-5 (R.M. 206.9-.7) Bridge crossing Cherry Creek Drain at gaging station 0.7 miles from confluence with North Platte River.
6. KD-6 (R.M. 200.3-0.5) Bridge crossing Katzer Drain at gaging station 0.5 miles from confluence with North Platte River.
7. NP-7 (R.M. 199.0) Henry, Nebraska, bridge. State Highway Connection 92 about 1 mile south of Henry, Nebraska. Sec. 4-R58W-T23-N. Approximately 10 miles below Torrington and Holly Sugar Plant outfall.

TABLE I

SUMMARY OF MICROBIOLOGICAL DATA -

NORTH PLATTE RIVER SURVEY

December 4-9, 1970

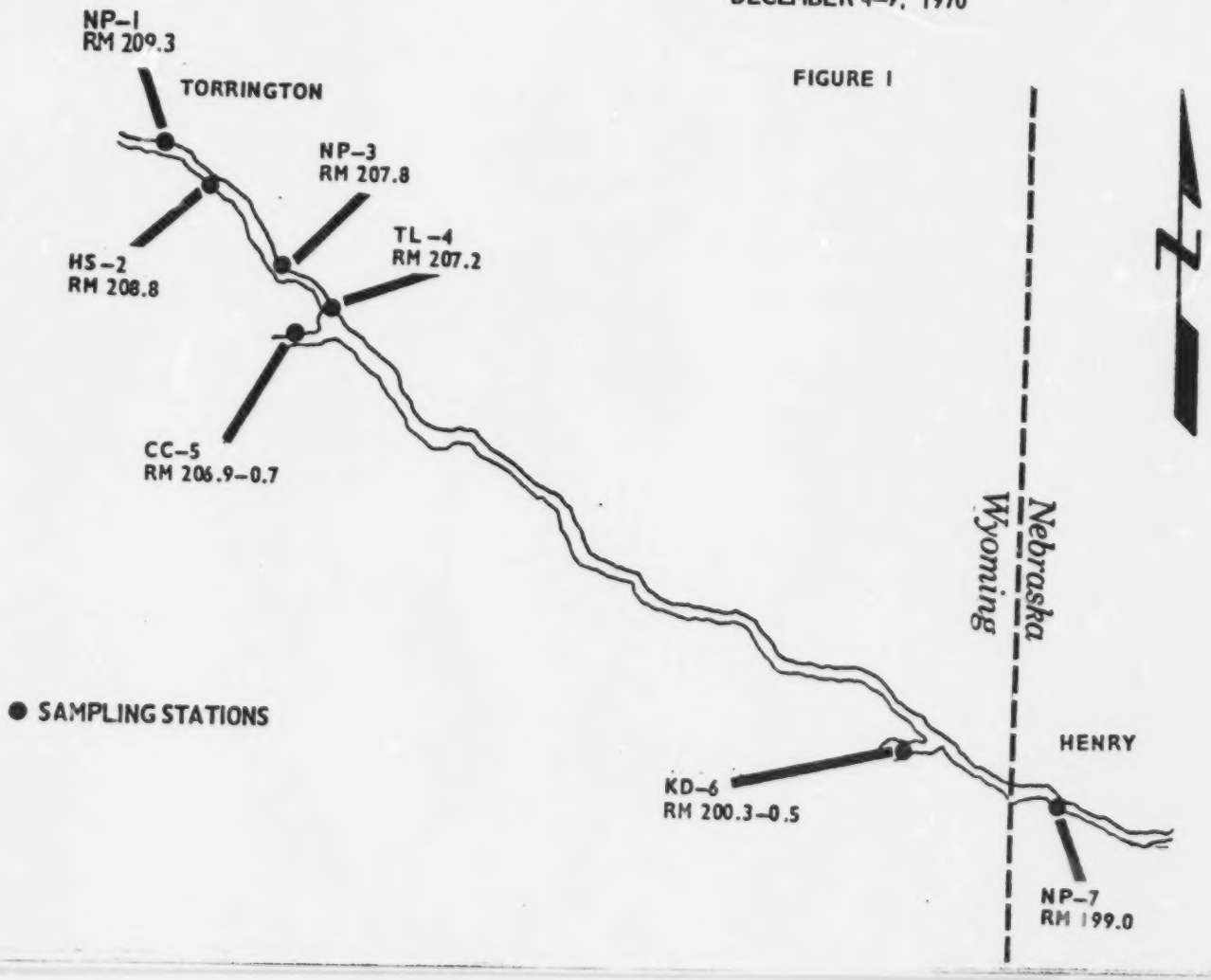
Sta.#	No. Samples	Ave. Flow (cfs)	Tot. Coli.(MF)/100 ml	Fecal Coli.(MF)/100 ml
NP-1	10		59 Geom. Mean 10 Minimum 240 Maximum	21 <1 160
HS-2	10	9.1	371,000 33,000 800,000	41,700 10,000 300,000
NP-3	10		16,300 3,500 58,000	2,950 220 12,000
TL-4	6	0.13	7,760 4,000 60,000	688 10 32,000
CC-5	10	12.1	129 10 2,100	76 10 260
KD-6	10	16.9	282 120 3,000	148 70 800
	STATE LINE			
NP-7	10	358	14,600 3,200 74,000	5,020 310 35,000

RIVER FLOW DIRECTION

NORTH PLATTE RIVER SURVEY

TORRINGTON, WYOMING TO HENRY, NEBRASKA
DECEMBER 4–9, 1970

FIGURE 1



DATE TIME	403. LAB PH SU	95. CNDUCTVY AT 25C MICROMHO	300. DO MG/L	304. BOD 2 DAY MG/L	310. BOD 5 DAY MG/L	500. RESIDUE TOTAL MG/L	530. RESIDUE TOT NFLT MG/L	505. RESIDUE TOT VOL MG/L	680. T ORG C C MG/L
70/12/ 4 700	8.10	820.00	10.40	1.00	1.50	605.00	7.00	161.00	6.60
70/12/ 4 1210	8.20	820.00	10.70	0.60	0.80	601.00	8.00	102.00	2.90
70/12/ 5 655	7.90	830.00	10.90	0.70	1.30	637.00	2.00	110.00	3.90
70/12/ 5 1230	8.20	860.00	10.90	0.40	0.70	617.00	2.00	95.00	2.90
70/12/ 6 640	8.10	840.00	9.87	0.50	0.70	605.00	0.00	102.00	2.70
70/12/ 6 1240	8.10	900.00	10.90	0.70	0.80	629.00	9.00	*********	4.60
70/12/ 7 425	8.20	810.00	9.50	0.00	0.10	641.00	5.00	122.00	3.40
70/12/ 7 605	8.20	820.00	9.45	0.50	0.80	632.00	6.00	112.00	4.30
70/12/ 8 245	8.00	840.00	9.00	0.60	1.00	655.00	12.00	93.00	3.10
70/12/ 9 805	8.20	830.00	9.25	0.50	0.90	621.00	13.00	130.00	4.60
ARITHMETIC MEAN	8.12	836.99	10.08	0.55	0.87	624.29	6.40	114.11	3.90
STD. DEVIATION	0.1037	26.3008	0.7555	0.2549	0.3945	17.7119	4.2998	21.3277	1.1907
NO. OF VALUES	10	10	10	10	10	10	10	9	10

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

HOLLY SUGAR CO. AT TORRINGTON
MISSOURI RIVER
NORTH PLATTE RIVER

DATE TIME	403. LAB PH SU	95. CNDUCTVY AT 25C MICROMHO	300. DO MG/L	304. BOD 2 DAY MG/L	310. MOD 5 DAY MG/L	500. RESIDUE TOTAL MG/L	530. RESIDUE TOT NFLT MG/L	505. RESIDUE TOT VOL MG/L	680. T ORG C C MG/L
70/12/ 4 755	7.30	920.00	4.62	129.00	169.00	1830.00	1250.00	368.00	145.00
70/12/ 4 1250	7.20	980.00	5.18	175.00	228.00	1600.00	760.00	406.00	115.00
70/12/ 5 745	7.70	1010.00	5.66	171.00	249.00	2210.00	655.00	458.00	150.00
70/12/ 5 1305	7.30	1010.00	3.50	138.00	253.00	2520.00	1900.00	502.00	120.00
70/12/ 6 715	7.40	1030.00	4.93	195.00	248.00	1989.99	1380.00	634.00	*********
70/12/ 6 1305	7.50	990.00	5.42	53.00	90.00	1030.00	544.00	206.00	*********
70/12/ 7 330	7.30	910.00	5.12	102.00	165.00	1580.00	1210.00	393.00	115.00
70/12/ 7 530	6.20	1030.00	4.48	398.00	516.00	2539.99	2070.00	884.00	120.00
70/12/ 8 310	7.00	970.00	4.30	117.00	160.00	1760.00	1370.00	354.00	110.00
70/12/ 9 835	6.50	1050.00	4.80	232.00	355.00	2200.00	2300.00	704.00	*********
ARITHMETIC MEAN	7.14	989.99	4.74	171.00	243.29	1925.99	1343.89	490.89	125.00
STD. DEVIATION	0.4600	46.4451	0.6669	94.4551	119.9685	466.1057	599.5096	198.1669	15.8118
NO. OF VALUES	10	10	10	10	10	10	10	10	7

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

UPSTREAM FROM TORRINGTON LAGOONS
MISSOURI RIVER
NORTH PLATTE RIVER

DATE TIME	403. LAB PH SU	95. CNDUCTVY AT 25C MICROMHO	300. DO MG/L	304. BOD 2 DAY MG/L	310. BOD 5 DAY MG/L	500. RESIDUE TOTAL MG/L	530. RESIDUE TOT NFLT MG/L	505. RESIDUE TOT VOL MG/L	680. T ORG C C MG/L
70/12/ 4 825	8.00	830.00	10.00	2.20	5.00	626.00	23.00	77.00	9.60
70/12/ 4 1310	8.10	830.00	10.70	4.70	6.00	622.00	26.00	170.00	6.60
70/12/ 5 805	7.90	850.00	10.30	3.80	11.00	745.00	16.00	122.00	7.50
70/12/ 5 1325	7.90	860.00	10.30	5.30	8.40	677.00	63.00	97.00	12.00
70/12/ 6 740	8.00	850.00	10.10	5.80	6.90	621.00	32.00	92.00	5.20
70/12/ 6 1325	8.10	960.00	10.40	3.40	5.80	620.00	29.00	115.00	7.40
70/12/ 7 410	7.90	840.00	9.80	3.60	6.00	677.00	24.00	117.00	5.20
70/12/ 7 625	8.00	850.00	9.68	3.80	5.80	668.00	37.00	113.00	7.90
70/12/ 9 350	7.90	900.00	9.30	3.70	5.10	687.00	40.00	103.00	7.80
70/12/ 9 850	8.00	840.00	9.60	6.90	9.60	625.00	42.00	142.00	9.30
ARITHMETIC MEAN	7.98	860.99	10.01	4.32	6.96	656.79	33.20	114.80	7.85
STD. DEVIATION	0.0792	40.1458	0.4256	1.3636	2.0331	41.4281	13.2564	26.3559	2.0635
NO. OF VALUES	10	10	10	10	10	10	10	10	10

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

TORRINGTON LAGOONS EFFLUENT
MISSOURI RIVER
NORTH PLATTE RIVER

DATE	TIME	403. LAB PH SU	95. CNDUCTVY AT 25C MICROMHO	300. DO MG/L	304. BOD 2 DAY MG/L	310. BOD 5 DAY MG/L	500. RESIDUE TOTAL MG/L	530. RESIDUE TOT NFLT MG/L	505. RESIDUE TOT VOL MG/L	00. T ORG C C MG/L
10/12/ 4	850	8.50	1479.99	12.90	18.00	29.00	*********	*********	*********	24.00
10/12/ 5	1355	8.80	1390.00	15.10	12.00	26.00	*********	*********	*********	32.00
10/12/ 6	810	8.40	1470.00	16.50	14.00+	14.00+	*********	*********	*********	*********
10/12/ 7	645	8.50	1460.00	14.20	15.00	29.00	*********	*********	*********	*********
10/12/ 8	405	8.10	1479.99	10.00	16.00	30.00	*********	*********	*********	*********
10/12/ 9	915	8.20	1420.00	13.20	24.00	44.00	*********	32.00	*********	*********
ARITHMETIC MEAN		8.41	1449.99	13.65	16.50	28.66	0.00	32.00	0.00	28.00
STD. DEVIATION		0.2485	36.9234	2.2188	4.1833	9.5847	0.0000	0.0000	0.0000	5.6568
NO. OF VALUES		6	5	5	6	6	0	1	0	2

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

TORRINGTON AT CHERRY CK DRAIN
MISSOURI RIVER
NORTH PLATTE RIVER

DATE	TIME	403. LAB PH SU	95. CNDUCTVY AT 25C MICROMHO	300. DO MG/L	304. BOD 2 DAY MG/L	310. BOD 5 DAY MG/L	500. RESIDUE TOTAL MG/L	530. RESIDUE TOT NFLT MG/L	505. RESIDUE TOT VOL MG/L	6MU. T ORG C C MG/L
70/12/ 4	800	8.40	2240.00	11.50	0.50	1.00	1630.00	19.00	176.00	14.00
70/12/ 4	1230	8.50	2240.00	14.50	1.30	2.20	1750.00	43.00	139.00	12.00
70/12/ 5	710	8.60	2320.00	10.80	0.60	1.00	1630.00	*********	141.00	*********
70/12/ 5	1245	8.50	2120.00	14.30	0.90	1.60	1540.00	11.00	133.00	*********
70/12/ 6	700	8.30	2210.00	10.70	1.10	1.50	1580.00	23.00	160.00	*********
70/12/ 6	1255	8.50	2420.00	15.60	0.70	1.50	1530.00	17.00	172.00	*********
70/12/ 7	350	8.40	2220.00	10.30	0.10	0.90	1610.00	16.00	211.00	*********
70/12/ 7	550	8.30	2220.00	10.30	0.70	1.30	1610.00	19.00	241.00	*********
70/12/ 8	325	8.30	2210.00	9.48	0.70	1.60	1600.00	28.00	131.00	*********
70/12/ 9	815	8.30	2140.00	10.50	0.50	1.20	1520.00	20.00	194.00	8.50
ARITHMETIC MEAN		8.41	2233.99	11.79	0.71	1.38	1599.99	21.77	169.80	11.50
STD. DEVIATION		0.1103	89.3291	2.1564	0.3348	0.3881	66.5372	9.2301	36.7115	2.7838
NO. OF VALUES		10	10	10	10	10	10	9	10	3

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

TORRINGTON AT KATZER DRAIN
MISSOURI RIVER
NORTH PLATTE RIVER

DATE TIME	403. LAB PH SU	95. CNDUCTVY AT 25C MICROMHO	300. DO MG/L	304. BOD 2 DAY MG/L	310. BOD 5 DAY MG/L	500. RESIDUE TOTAL MG/L	530. RESIDUE TOT NFLT MG/L	535. RESIDUE TOT VOL MG/L	680. T ORG C MG/L
70/12/ 4 930	8.30	1790.00	11.10	1.20	2.20	2310.00	16.00	190.00	12.00
70/12/ 4 1355	8.40	1730.00	12.80	0.60	1.20	1300.00	*********	165.00	9.30
70/12/ 5 900	8.40	1870.00	11.20	0.50	1.20	1390.00	16.00	201.00	*********
70/12/ 5 1440	8.40	1820.00	12.80	0.50	0.90	1370.00	8.00	111.00	*********
70/12/ 6 900	8.30	2000.00	11.30	0.40	0.90	1330.00	25.00	109.00	*********
70/12/ 6 1040	8.30	2000.00	11.80	0.50	0.90	1360.00	26.00	171.00	*********
70/12/ 7 250	8.30	1770.00	10.40	0.10	0.60	1360.00	29.00	117.00	*********
70/12/ 7 800	8.30	1820.00	10.40	*********	1.10	1339.99	20.00	196.00	*********
70/12/ 8 840	8.30	1840.00	10.20	0.60	1.10	1409.99	27.00	155.00	*********
70/12/ 9 730	8.30	1790.00	9.75	0.60	1.30	1300.00	23.00	236.00	12.00
ARITHMETIC MEAN	8.33	1842.99	11.17	0.55	1.14	1446.99	21.11	165.10	11.10
STD. DEVIATION	0.0483	91.2062	1.0476	0.2877	0.4247	305.2952	6.7536	42.7070	1.5588
NO. OF VALUES	10	10	10	9	10	10	9	10	3

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

BELOW TORRINGTON, WYOMING
MISSOURI RIVER
NORTH PLATTE RIVER

DATE TIME	403. LAB PH SU	95. CNDUCTVY AT 25C MICROMHO	300. DO MG/L	304. BOD 2 DAY MG/L	310. BOD 5 DAY MG/L	500. RESIDUE TOTAL MG/L	530. RESIDUE TOT NFLT MG/L	505. RESIDUE TOT VOL MG/L	680. T ORG C C MG/L
70/12/ 4 920	8.10	920.00	10.40	3.20	4.80	672.00	29.00	125.00	7.70
70/12/ 4 1345	8.20	910.00	10.50	2.30	3.20	586.00	39.00	87.00	4.70
70/12/ 5 845	8.10	960.00	10.10	********	8.50	778.00	20.00	156.00	5.70
70/12/ 5 1420	8.10	930.00	10.10	2.40	5.20	726.00	15.00	180.00	5.90
70/12/ 6 845	7.90	1030.00	10.10	5.30	6.90	703.00	29.00	132.00	6.80
70/12/ 6 1050	8.10	960.00	10.10	5.10	7.80	739.00	25.00	136.00	7.60
70/12/ 7 240	8.20	910.00	9.30	1.40	2.20	641.00	29.00	75.00	4.40
70/12/ 7 830	8.10	950.00	9.48	1.80	3.00	718.00	25.00	137.00	5.50
70/12/ 8 940	8.20	990.00	9.42	1.20	2.00	735.00	33.00	143.00	7.40
70/12/ 9 715	8.20	910.00	9.48	1.80	2.90	703.00	26.00	197.00	4.10
ARITHMETIC MEAN	8.12	946.99	9.89	2.72	4.66	710.09	27.00	136.80	5.98
STD. DEVIATION	0.0923	39.7570	0.4364	1.5237	2.3996	38.4375	6.6165	37.0580	1.3439
NO. OF VALUES	10	10	10	9	10	10	10	10	10

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

TORRINGTON, WYOMING CONTROL STA.
MISSOURI RIVER
NORTH PLATTE RIVER

DATE	TIME	31501. COLIFORM IMEDENDO MF/100ML	31616. FEC COLI MF-C44.5 MF/100ML
70/12/ 4	700	54.00	18.00
70/12/ 4	1210	16.00	10.00
70/12/ 5	655	240.00	160.00
70/12/ 5	1230	26.00	1.00-
70/12/ 6	640	200.00	90.00
70/12/ 6	1240	10.00	8.00
70/12/ 7	425	80.00	32.00
70/12/ 7	605	94.00	20.00
70/12/ 8	245	110.00	30.00
70/12/ 9	805	62.00	62.00
GEOMETRIC MEAN		59.	21.
LOG E STD. DEV.		1.0376	1.4329
NO. OF VALUES		10	10

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

HOLLY SUGAR CO. AT TORRINGTON
MISSOURI RIVER
NORTH PLATTE RIVER

DATE	TIME	31501. COLIFORM IMEDENDO MF/100ML	31616. FEC COLI MF-C44.5 MF/100ML
70/12/ 4	755	33000.00	10000.00
70/12/ 4	1250	700000.00	300000.00
70/12/ 5	745	190000.00	10000.00
70/12/ 5	1205	800000.00	70000.00
70/12/ 6	715	750000.12	70000.00
70/12/ 6	1305	680000.00	33000.00
70/12/ 7	330	420000.00	180000.00
70/12/ 7	530	620000.00	29999.99
70/12/ 8	310	320000.00	20000.00
70/12/ 9	835	330000.00	29999.99
GEOMETRIC MEAN		370876.	41651.
LOG E STD. DEV.		0.9704	1.1284
NO. OF VALUES		10	10

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

UPSTREAM FROM TORRINGTON LAGOONS
MISSOURI RIVER
NORTH PLATTE RIVER

DATE	TIME	31501. COLIFORM IMEDENDO MF/100ML	31616. FEC COLI MF-C44.5 MF/100ML
70/12/ 4	825	30999.99	1200.00
70/12/ 4	1310	11000.00	1200.00
70/12/ 5	805	23000.00	5600.00
70/12/ 5	1325	40000.00	6000.00
70/12/ 6	740	58000.00	6000.00
70/12/ 6	1325	3500.00	220.00
70/12/ 7	410	36000.00	3500.00
70/12/ 7	625	4500.00	3000.00
70/12/ 8	350	7000.00	6300.00
70/12/ 9	850	18000.00	12000.00
GEOMETRIC MEAN		16270.	2954.
LOG E STD. DEV.		0.9706	1.1714
NO. OF VALUES		10	10

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

TORRINGTON LAGOON'S EFFLUENT
MISSOURI RIVER
NORTH PLATTE RIVER

DATE	TIME	31501. COLIFORM IMEDENDO MF/100ML	31616. FEC COLI MF-C44.5 MF/100ML
70/12/ 4	850	6600.00	1500.00
70/12/ 5	1355	4800.00	100.00
70/12/ 6	810	3600.00	10.00
70/12/ 7	645	4000.00	600.00
70/12/ 8	405	59999.99	32000.00
70/12/ 9	915	8000.00	3699.99
GEOMETRIC MEAN		7763.	688.
LOG E STD. DEV.		1.0460	2.8221
NO. OF VALUES		6	6

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

TORRINGTON AT CHERRY CK DRAIN
MISSOURI RIVER
NORTH PLATTE RIVER

DATE	TIME	31501. COLIFORM IMEDENDO MF/100ML	31616. FEC COLI MF-C44.5 MF/100ML
70/12/ 4	800	2100.00	200.00
70/12/ 4	1230	50.00	33.00
70/12/ 5	710	280.00	200.00
70/12/ 5	1245	120.00	70.00
70/12/ 6	700	110.00	100.00
70/12/ 6	1255	10.00	10.00
70/12/ 7	350	220.00	150.00
70/12/ 7	550	50.00	26.00
70/12/ 8	325	100.00	75.00
70/12/ 9	815	300.00	260.00
GEOMETRIC MEAN		129.	76.
LOG E STD. DEV.		1.4068	1.0482
NO. OF VALUES		10	10

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

TORRINGTON AT KATZER DRAIN
MISSOURI RIVER
NORTH PLATTE RIVER

DATE	TIME	31501. COLIFORM IMEDENDO MF/100ML	31616. FEC COLI MF-C44.5 MF/100ML
70/12/ 4	930	120.00	90.00
70/12/ 4	1355	3000.00	800.00
70/12/ 5	900	160.00	150.00
70/12/ 5	1440	120.00	80.00
70/12/ 6	900	270.00	250.00
70/12/ 6	1040	320.00	70.00
70/12/ 7	250	200.00	170.00
70/12/ 7	800	380.00	160.00
70/12/ 8	840	450.00	160.00
70/12/ 9	730	160.00	80.00
GEOMETRIC MEAN		282.	148.
LOG E STD. DEV.		0.9508	0.7240
NO. OF VALUES		10	10

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

DATE	TIME	31501. COLIFORM IMEDENDO MF/100ML	31616. FEC COLI MF-C44.5 MF/100ML
70/12/ 4	920	74000.00	30999.99
70/12/ 4	1345	9000.00	310.00
70/12/ 5	845	10000.00	10000.00
70/12/ 5	1420	4000.00	320.00
70/12/ 6	845	29999.99	26000.00
70/12/ 6	1050	3200.00	500.00
70/12/ 7	240	40000.00	35000.00
70/12/ 7	830	29999.99	12000.00
70/12/ 8	940	20000.00	12000.00
70/12/ 9	715	7000.00	5000.00
GEOMETRIC MEAN		14564.	5015.
LOG E STD. DEV.		1.0373	1.8984
NO. OF VALUES		10	10

ADDITIONAL PARAMETERS AVAILABLE FOR STATION

General Discussion

MR. MONAHAN: Thank you, Mr. Dahl.

I would like to call upon Holly Sugar now for any statement they would like to make. I also think this record should show that Holly Sugar contacted our office upon receipt of their 180-day notice and did meet with us on July 1 regarding this particular problem.

Mr. Miles.

MR. MILES: Thank you, Mr. Monahan.

I have a prepared statement. I would like to give a copy to the recorder.

MR. MONAHAN: She will mark this as Exhibit C.

(The statement by Mr. George Miles was marked as Exhibit C.)

MR. MILES: Prior to making our official statement, I would like to say a couple of things.

One is, Holly Sugar has applied for its permit to discharge in accordance with the law and until July 1 the permit application system was something less than delineated and since then it has also been changed again so we have additional forms to fill out in order to meet even a permit application. So we have made our application for the Torrington plant and are taking the steps necessary to comply with that law.

General Discussion

We would also be interested to know how many, if any, of these permits have ever been issued other than the five.

MR. MONAHAN: Well, as Mr. Dahl said, there have been five permits issued since 1899. The problem with that has been that the courts have not interpreted the particular Federal statute until recent years as to mean any waste coming out of any outfall into any navigable stream or any tributary thereof. It was construed prior to the past few years to mean something of a block to navigation in a stream, and this is really the reason it hasn't been applied. And, of course, again the past two or three years a lot of attention has been drawn to the environment and the protection of that environment. This is one vehicle, we hope, that will be effective in doing this.

MR. MILES: Could I ask one other question before I make my statement?

We understand there are some 40,000 permits that need to be applied for. Do we have any idea how many have made application at this time?

MR. WILLIAMSON: A lot more than that.

MR. MONAHAN: I have no idea how many nationwide have made application. I know the Corps of Engineers in the Kansas City district have received--what, Bob, two or three hundred?

MR. WILLIAMSON: We have got over 700 in the State of

Wyoming in the Denver office.

MR. MONAHAN: That is not the Kansas City region, though.

MR. WILLIAMSON: No, but they should have more.

MR. MARKEY: The Corps office in Kansas City has received approximately 300 applications, of which we have received 100. Nationwide I don't have the figure.

MR. MILES: So the total number--I mean we have made our applications, at least.

MR. WILLIAMSON: I would like to point out, the State of Kansas has at least 50,000 oil wells which practically all are producing water and every one of those is required to be permitted.

MR. MARKEY: Yes.

MR. WILLIAMSON: So I am saying you have more than two or three hundred in the basin.

MR. MARKEY: I didn't say that. I said received in the Corps office.

MR. MONAHAN: Actually received in the Corps of Engineers office in Kansas City.

MR. WILLIAMSON: Corps of Engineers office?

MR. MONAHAN: Yes. Be very clear, this is what we have received now. We don't say this is all of them.

General Discussion

MR. MARKEY: For example, the Corps office in Omaha has received something like 500 applications; the same number have been received by the Corps of Engineers office in Rock Island. So we don't have a total yet. I understand there are probably over a few thousand who have applied nationwide.

MR. MILES: Thank you.

MR. WILLIAMSON: I have a question here, if I may.

MR. MONAHAN: Go ahead.

MR. WILLIAMSON: I believe it was in the Corps of Engineers regulations, if I remember, or at least it was Colonel Fuller that said no prosecution could be brought as long as somebody was covered by an application.

MR. MONAHAN: That is not true.

MR. WILLIAMSON: That was what we were told in Casper.

MR. MONAHAN: The Federal Government can bring an action against anybody even though they have an application permit. There was a Federal court case decided in the State of Maine recently with that exact situation, Maplewood Poultry.

MR. WILLIAMSON: We were misinformed, then, by the Corps, because this was definitely asked at a Casper meeting.

C. W. MILES, JR.

VICE PRESIDENT AND GENERAL SUPERINTENDENT

HOLLY SUGAR CORPORATION

MR. MILES: Mr. Chairman, I am George Miles, Vice President and General Superintendent for Holly Sugar Corporation. We are here to respond to the 180-day notification of violation forwarded from the Washington, D. C., office of the Environmental Protection Agency. This notification was mailed on June 15, 1971, to our factory manager at the Torrington, Wyoming, plant.

First, let me say that we in Holly Sugar have been and continue to be vitally concerned with environmental enhancement. In fact, years ago before it became fashionable, we initiated programs for the recycling of process waters, the impounding of wastes, and the protection of air emissions by use of cyclones, filters and scrubbers. It has been and continues to be our basic policy to conserve water. We also utilize suitable screening facilities to remove any weeds, tailings, chips, beet tops and other organic matters from wastewater flows, we install clarifiers for the removal of suspended solids, we recycle both condenser and transport waters, cool condenser waters, and impound clarifier underflows, waste lime, boil-out wastes, and any other undesirable flows.

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KANSAS CITY, MISSOURI 64138

•C. W. Miles, Jr.

Our programs and schedules for installation at our plants are all based on this basic program. Those that are not now completed we have scheduled for completion by July 1, 1972, the date indicated in various State programs, including that of the State of Wyoming.

We were indeed surprised to receive the notification from EPA, particularly in view of our concern in these matters and in view of our having identified Holly's scheduled program to the State of Wyoming and Wyoming's indication that we were not in violation of its established stream classifications. However, we understand that the EPA has indeed changed the ground rules, and in recent meetings the EPA has indicated to us that stream classification standards will no longer be applicable and the ultimately established EPA standards will be based on effluent analysis. We are concerned by the fact that the information on which EPA has based its citation was collected and analyzed in early December of 1970. EPA's computer runs on that data were completed early in January of 1971 and Holly Sugar was not advised until six months later in June of this year. Such a procedure makes it very difficult to comply with the EPA notice before the start of the 1971 beet campaign, particularly in view of the often lengthy delivery schedules on equipment and now the added problem of railroad strikes.

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C. W. Miles, Jr.

However, to effect resolution of the problem, we propose to speed up our program at the Torrington plant, where we are already in the process of installing a clarifier. Several years ago we took steps to impound wet pulp silo underflow, waste lime, Steffens waste and boil-out chemicals, thus eliminating these materials from our waste discharge. In a continuing program of concern, we will modify our program and make every effort to accomplish the following:

1. Complete the clarifier installation.

2. Complete the relocation of the transport water screening facilities.

3. Impound the clarifier underflow material.

4. Install a condenser water cooling tower prior to the 1972 operating season, and recycle all possible condenser water at that time.

5. Separate the condenser water from the beet transport water, and any excess not used in other parts of the factory will be discharged directly to the North Platte River. This is clear, clean water with some increased temperature at about 45°C.

6. Impound the excess clarifier overflow that cannot be recycled for beet transport water.

Of the six improvements which I have just enumerated,

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the first three were in progress prior to our receipt of the EPA notice, and the fourth item, the installation of the cooling tower, had already been planned and was scheduled for completion prior to the 1972 operating season. The last two improvement items which I enumerated--that is, the impounding of excess clarifier overflow and the separation of the condenser water from the beet transport water--represent modifications of our existing program as a result of the EPA notice. Although we are making every effort to complete these two last minute modifications to our program for this year's operations, it is possible that delivery of necessary pumps and electrical equipment will preclude our completing the program before our start-up date of around October 1, 1971. In any event, the indicated program will be completed as expeditiously as possible; had we been advised earlier, we could have arranged for the modifications in ample time.

Again, let me emphasize that Holly Sugar has been and continues to be concerned about the environment. We have long worked on these problems and believed that we were in compliance with all current regulations and standards. We will continue to cooperate in every feasible manner to work out solutions to the problem.

Thank you.

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A. E. Williamson

MR. MONAHAN: Thank you, Mr. Miles.

I call upon the States of Wyoming and Nebraska to make any statement they would like to make at this time.

Mr. Williamson.

MR. WILLIAMSON: Thank you.

A. E. WILLIAMSON

STATE HEALTH DEPARTMENT

CHEYENNE, WYOMING

MR. WILLIAMSON: Thank you.

I think probably the place to start is a statement of our State position on this. We think our standards are good, reasonable standards. We think they were adopted after considering all aspects of water quality. And I might point out, in your report here you didn't indicate that Wyoming's standards were approved by the Department of the Interior one month prior to the time Nebraska's standards were approved. We had ours approved in November 1968. So I think we are looking at something here where the Department of the Interior said you have got good standards and you have got good standards, yet they backed off from making a decision of whose standard was reasonable, and we feel that we gave probably much more consideration to reasonableness in our standards than most States

did. I think if you get back to what is a standard and what is the test of a standard, then the sole test is a reasonable standard, and if you ever go to court with it we will probably have to prove that it is reasonable.

I might say that our coliform standard, which is in question, was a result of about a little over a year's negotiation between the State of Wyoming and the Federal agency. As to what was reasonable was the whole question. And our standard, as I say, is a negotiated result that everybody was happy with.

So we make our statement that considering the use of the water during this time of the year, considering the source of organisms--which has never been brought out yet, that in 1964 it was definitely proven these are soil organisms; there is no attachment to humans--that ours is a reasonable standard. And to try to apply corrective measures to a standard which under these cases would have no significance whatsoever, then it becomes unreasonable.

Now, as we all know, the ones, at least, that have been in the public health business for years, the coliform standard is strictly an indicator of a possible hazard to public health. In order to be an indicator organism in regards to public health it has to be associated with people, not

animals, and we would make our contention that here we are looking at a paper standard that isn't presenting any public health hazard to the people of Nebraska.

There are many things that could be argued through this from one end to the other, particularly on the degree of treatment. There are a lot of whys in here that I would like to have answered. I get the basic feeling reading this that this is a case of treatment for treatment's sake. I see no enhancement of quality or no additional uses being made. So here we are spending a large sum of money for the mere fact of meeting a paper standard or for something that will not enhance the water quality.

I think these are all points, just in fairness to an industry, that should be considered. I am very glad to see that Holly is doing additional work. I certainly always appreciate this. But the question that always comes to my mind is why. Where is the figure that says this is essential?

This will be enough at this time. I think there will probably be additional discussions which I would comment on later.

MR. MONAHAN: Well, in a partial answer to that, Mr. Williamson, I am not an engineer or a chemist or biologist, but the violation here is of the Nebraska water quality standards

which have been approved by the Federal Government, not Wyoming's. As I understand it, Wyoming has no water quality standard--

MR. WILLIAMSON: Yes, they have.

MR. MONAHAN: --for the stretch of the river from Holly's plant to the State line of Nebraska.

MR. WILLIAMSON: Oh, yes, we have. We have got a 2,000 on there from May 1 to October 1.

MR. DAHL: Not during the time in question, though.

MR. WILLIAMSON: Not during the wintertime.

MR. MONAHAN: Not during the wintertime.

MR. WILLIAMSON: Because there is no use made of that water other than supporting wildlife and fish.

MR. MONAHAN: Of course during the wintertime is when their plant is in operation.

MR. WILLIAMSON: Sure.

MR. MONAHAN: That is when the pollution takes place, doesn't it?

MR. WILLIAMSON: Yes, but what are we affecting if you are calling it pollution? What we are talking about here is danger to public health. This is what this standard was designed for was danger to public health.

MR. MONAHAN: Go ahead, Tom.

General Discussion

MR. DAHL: I would like to add something about this fallacy about the organisms associated strictly with soil. It has been very conclusively demonstrated in past work that these organisms are fecal related, a number of the organisms are fecal related. They come in the beets associated with manure, rodents, in the soils, any connections there might be from sanitary system drainage, one thing or another. But very definitely it has been proven that these are associated with fecal material.

MR. WILLIAMSON: That is not an argument, we will agree there, but we say the source of the fecal coliform is from the soil on the beach which is due to applying about 20 tons of manure per acre per each year.

MR. DAHL: What we provide in this system, we provide ideal conditions for the growth of organisms, we bring them in contact with the warm water from the condenser waters, and we have an ideal food media for them and these organisms explode and that is the basis--

MR. WILLIAMSON: Your 1964 study showed that there was no material increase in growth, that it was due to the fine screens breaking up the soil particles, in fact the count doubled going across the fine screens just due to homogenizing the particles present.

MR. DAHL: We definitely have growth within the

systems, there is no question about that. In our work on the Red River, for example, at times our total coliform counts were identical with our fecal coliform counts. That the temperatures which did exist provided ideal conditions for this growth has been very amply pointed out by the South Platte project report relating to the sugar beet industry, which documented identification of organisms in past studies as well as work we have done recently.

MR. WILLIAMSON: Let's assume they do grow. The source is still animal, not human.

MR. DAHL: I don't get the connection. Are you saying there are no pathogens associated with animals, only with humans?

MR. WILLIAMSON: I am saying that there are very few, if any, epidemics recorded where fecal material from cattle have caused sickness in humans. Now, you list for me the diseases that are transmitted from cattle to humans through fecal discharges, show me the evidence that we have had any outbreaks due to them, and I will start listening.

MR. DAHL: I am not a microbiologist or an epidemiologist.

MR. WILLIAMSON: No, but I am a public health personnel, I have been in the business for 30 years, and I have

yet to know of an associated epidemic from fecal discharges from cattle that might be traced back as the source on it, and this is the thing I am arguing. There is no public health significance to the bugs you are measuring here.

Now, if they are from sewage, I won't argue with you, but if they are coming from cattle, I will argue. And I have argued with the boys on this, they know my feelings on it in the past. I want to see some proof.

MR. MARKEY: Just for the record, Mr. Chairman, could we have a statement from Mr. Manhart as to what pathogens could be associated with cattle?

MR. MONAHAN: Is Mr. Manhart here?

MR. MANHART: Yes.

MR. MONAHAN: Why don't you come forward, Mr. Manhart? State your name, your address and where you work.

MR. MANHART: I am a microbiologist with the EPA, Kansas City.

We all know that the fecal coliform pollution indicator group has established within the criteria that the possible source of pollution is either from man or animals, this is established, correct, the group itself. There is a possibility it can come from both and this is what we enumerated in this study.

We also know that Salmonellosis is present in animals as well as in humans, it is within their intestines, within their system.

We also know through literature and investigation that Salmonellosis, Salmonellosis typhoid, typhii if you want to say this, can be picked up or can be gotten by humans from animals either through--well, for instance, meat packing or any other bacteria, and in a sense a stream is a carrier of possible pathogenic organisms.

MR. WILLIAMSON: We have many listed outbreaks of Salmonellosis due to meat through the food chain.

MR. MANHART: What do we have in any food poisoning?

MR. WILLIAMSON: Salmonellosis, yes.

MR. MANHART: Very often.

MR. WILLIAMSON: I am saying where is our evidence on water transmission?

MR. MANHART: Well, our evidence in water transmission is we can show beyond the doubt on most streams that Salmonellosis is present.

MR. WILLIAMSON: I can show it to you in streams that have nothing but wild animals on it, 28 different varieties.

MR. MANHART: Yes, we know this is carried in the animals. In turn isn't this stream in turn bringing it to

possible sources of contamination? We admit and we will not deny that we are using a total coliform indicator group and the fecal coliform indicator group to show possible pathogenic organisms coming or being in this stream or water. Now, in turn we go back to this effluent that shows the source it is coming from.

MR. WILLIAMSON: There is no question you can isolate Salmonella from any stream if you wish to do it, but as yet with all our public health epidemiology we have never tied it into transmission by this route.

I would point out three very detailed studies for coliform associated with health.

MR. MANHART: Yes.

MR. WILLIAMSON: Swimming pools, we were worried about it.

MR. MANHART: Right.

MR. WILLIAMSON: There were two in the United States, one in Chicago and the other, I believe, in Cincinnati, on the Ohio River. The findings were completely negative, that there is no association with the coliform as to disease produced in swimmers. The English made a very detailed study and they came to the conclusion if you do not see chunks of fecal matter go anead and swim, that there is no relationship between coliform

and public health in swimming waters. And when we can't prove it in swimming waters, I am not about to buy the danger in the wintertime when nobody is swimming on a river, there is nobody fishing on the river. The only thing I can think of that would be on that river is a few duck hunters.

MR. MANHART: That is correct.

MR. WILLIAMSON: So we are looking at use, we are looking at danger. To me it adds up negative and this is why we ended up with a coliform of no coliform during the non-recreation season. We did agree in our negotiation there might be this what you are talking about, this infinitesimal possibility of somebody getting sick fishing or kids paddling in the river. O. K., we put our coliform on for that recreational season. When they stop using the river and there is no use for it, then we see this as an unrealistic, an unreasonable standard.

MR. MANHART: Would you be interested in some of the survival of coliform organisms and Salmonella organisms, survival rates?

MR. WILLIAMSON: I have seen lots of the figures on it.

MR. MANHART: And we could possibly establish here that Salmonella could survive in this stream after the beet

season into the spring of the year, could we not?

MR. WILLIAMSON: That is a pretty long time.

MR. MANHART: I realize this.

MR. WILLIAMSON: It wouldn't be a very big concentration of it.

MR. MANHART: It could survive throughout the winter on upstream reservoirs and this has been proved beyond a doubt in the literature and it has come down in the spring rains into the reservoirs and in turn gotten into the systems that people will use, and in turn, if this stream were used by people in the spring of the year, there is a possibility that Salmonella and other pathogenic organisms and viruses that we failed to mention here at all could be present and in turn be picked up by these people by spring usage or summer usage.

MR. WILLIAMSON: Grant you there will be a few of them survive.

MR. MANHART: Yes.

MR. WILLIAMSON: I don't think the rate will be high at that period of time.

MR. MANHART: Well, in a true sense of the word we come back to, again, the total coliform group, the fecal coliform group. These are indicators, we agree to this point, and in turn we know through previous experiments and literature,

the history of the whole program, that if we turn up so many total coliform groups, so many fecal coliform groups, it is likely there are other pathogenic organisms present and they are possibly surviving in this stream into the spring and into the summer.

MR. WILLIAMSON: Possibly a few of them.

MR. MANHART: Yes.

MR. WILLIAMSON: But I still say I question their public health significance.

MR. MANHART: A source of possible contamination.

MR. WILLIAMSON: O. K., take it when we talked--

MR. MANHART: And maintained throughout the year into the spring.

MR. WILLIAMSON: We have talked about the uses, talked about the possibility of surviving. What is the condition of the North Platte River below here?

MR. MANHART: Below where?

MR. WILLIAMSON: Below the State line. I know of one raw sewage discharge that is still going into it.

MR. MANHART: Well, it is possible. I am not saying it isn't. I don't know right at the present time.

MR. WILLIAMSON: And I mean this was one of the findings of the conference, three sessions of the conference,

and I sat in on all three of them, that Wyoming would not have to produce better water than what was in the river down here. It was completely agreed at that time that Wyoming should not have to produce better water than what they are producing locally. At least we don't have a raw sewage discharge that I know of in Wyoming yet.

MR. DAHL: I don't think anybody is making allegations that what we do with Holly Sugar will preclude any actions with anybody else. We would expect that there will be very close consistency as to what will be required of other similar entities. I think that is our basic premise.

MR. MONAHAN: Everybody in this country, we hope, will some day have clean water in the streams and clean air all the time, not merely in the summertime. I think everybody is entitled to this. I think our agency is dedicated to this. Just because there is a sewage treatment plant downstream in Nebraska, sure, that should be stopped too. I am not arguing with you about that. It should all be stopped. This is what we are driving at.

I hope Holly Sugar doesn't think we are picking on them. We are not. As Mr. Ruckelshaus said in January 1971, I wish I had the exact quote here, when he talked to the National Press Club in Washington, D. C., that he has used all the tools

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and persuasion that he has to help clean up the environment, starting, as he said, right now. This we hope is a start here. We have had other such conferences.

MR. MILES: We note that Mr. Ruckelshaus made a statement in the paper this morning about a change in the standards procedures at this point on EPA.

MR. MONAHAN: Yes, we read the paper too. (Laughter.) Well --

MR. DAHL: It is too early to say what significance or anything that will have.

MR. MONAHAN: It is too early to say.

Thank you, Mr. Manhart.

Does somebody have a question?

MR. CURRY: I am Bob Curry. I am a beet farmer from Goshen County. I am a member of the Goshen County Beet Growers Association, on the Board of Directors.

This is very confusing to me. This is a reflection directly back to the farmer because we use manure on our crops.

MR. MONAHAN: That is right.

MR. CURRY: There is a big to-do about phosphates.

MR. MONAHAN: That is true.

MR. CURRY: I am a man in my middle 30's. It sounds like with you people on our backs I had better get out of the

farming business.

MR. MONAHAN: No, that is not true.

MR. DAHL: The program we have laid out here for the industry says that it can be controlled at that source such that there will not be a problem. That does not relate directly back to your programs within your farming techniques. We say there is a controllable--there is a point of control and that is at the plant as it releases in the water.

MR. CURRY: What you have told Holly, though, on this 180-day ultimatum is the same thing that you would tell me three days before I started to irrigate my beets, and this is exactly what would happen--is happening with runoff. There is manure running off the ends of my fields into these streams. If you said three days before I started to irrigate my beets, I am sorry, fellows, but you have got to comply to these standards before you start irrigating your beets, this is what I am talking about.

MR. DAHL: There are, without a doubt, overall problems. We are talking about controllable point sources and that is what we are dealing with here.

MR. MONAHAN: Are you talking about the amount of time given to Holly Sugar?

MR. CURRY: Yes. I think it is utterly unrealistic.

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I am not questioning that this is happening. I can't-- What I am afraid of, we participate, the beet growers and Holly, we have a participating contract. At the end of this 180 days there will be a lot of sugar beets left to be sliced. Now, maybe things will go along fine and Holly will be able to comply with this. I hope they do. But what will happen to us if this regulation is applied? Now, there is not enough profit in the beet industry that Holly can afford to pay the $10,000 a day fine.

MR. MONAHAN: Of course, as I said at the beginning of this hearing, after 180 days if Holly has not complied with what we believe they can do or has not submitted an acceptable schedule, then the matter would be referred to the United States Attorney for his judgment. Now, this is not automatic court action. You don't just walk out of here after 180 days and, bang, you are in Federal court. It just doesn't happen that way, but it would be to that particular stage.

We are asking Holly today to tell us what they can do, what they are willing to do, and show us some good faith effort on their part to clean up, as Mr. Dahl said, this point source of pollution.

MR. DAHL: And I think the schedule that they have set forth is consistent with this. I think they are proceeding

in good faith to accomplish the same thing that we want.

MR. CURRY: This 180-day thing is what has bugged us. It puts a terrific amount of fear in us and will catch us right in the middle of the campaign if some unforeseen thing happens that they can't get this equipment installed.

MR. DAHL: I think there is no question that we recognize physical problems if they do come up, if there should be some extraneous circumstance. I don't think this will be a matter of question. But we are asking for an expeditious accomplishment of this. I think that is what we have set out here and I think that is what they have said that they will try to do in this matter.

MR. CURRY: Well, are you willing to state publicly, then, that if this equipment can't be put in and doesn't arrive that this won't apply?

MR. DAHL: Obviously if there is some completely--some uncontrollable circumstance that no one can foresee, obviously this is taken into consideration. The fact that we are here on a hearing like this rather than a direct action type thing is an indicator of the fact that we are trying to proceed in good faith and work this out on an informal basis prior to any necessity for any court action. I think that is what we are doing right here by being here.

General Discussion

MR. CURRY: Thank you, Mr. Chairman.

MR. WILLIAMSON: Open for further discussion? Back there.

MR. GIBBS: My name is Lawrence Gibbs. I am a citizen from Scottsbluff. I would like to ask a question of the Environmental Protection Agency and the gentleman from Wyoming.

Has the EPA taken into consideration wildlife in their water quality standards? And if not, why not?

And I would also like the same question answered by the gentleman from Wyoming.

MR. MARKEY: I might answer that question. The State of Nebraska--perhaps the State of Nebraska could answer the question on wildlife. They have considered it in the classification of the stream. The North Platte River is classified as a Class C stream under the Nebraska water quality standards. One of the designated uses of that stream is wildlife and fur-bearing animals. Yes, it has been considered.

MR. GIBBS: Do these standards that they have set up protect fish and other wildlife?

MR. MARKEY: Yes, they do.

MR. MONAHAN: I think the State of Nebraska may have a statement to make.

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C. R. Starr

Mr. Starr.

CLAUDE R. STARR

STATE OF NEBRASKA ENVIRONMENTAL CONTROL

WATER POLLUTION SECTION, LINCOLN, NEBRASKA

MR. STARR: Yes, Claude Starr, State of Nebraska Environmental Control, Water Pollution Section.

I think at this time you pretty well covered most of the areas. I don't know that we have any formal statement to make at this particular time concerning the situation. We do feel that notice was a little bit short. We got our notice on this after Holly did. This is our primary comment right now.

MR. MONAHAN: As I said at the beginning of this hearing, if you wish to submit a written statement, you will have 10 calendar days after we close today to do so.

MR. STARR: Right.

MR. MONAHAN: Would the State Senator care to say anything?

SENATOR VANDERPOOL: Mr. Chairman, you did allow that we can submit a formal statement within 10 days?

MR. MONAHAN: Yes, sir.

SENATOR VANDERPOOL: I think the hearing has been pretty well resolved here in that I don't think the debate is

over on what is considered unfair pollutants in a stream. We will be going on this for many years to come.

But it seems to me that Holly has said in answer to Mr. Dahl that we have taken these steps which apparently are meeting your department's request. Being a citizen of the area to be affected in 180 days, which now has been cleared up, I was quite certain that the government wouldn't clamp down in 180 days if we could show reasonably and certainly that machinery and equipment could not be obtained in a reasonable time and that we would have some opportunity to have an extension. But there was immediately the fear that in the middle of the great source of the economy in our area, as well as this area here, that we might suffer a shutdown. I think Holly was asking today can we have some reasonable assurance that with this program that they have outlined that we will have a little additional time and I think you have indicated that this would be possible and that is fine.

Thank you very much.

MR. MONAHAN: Let there be no mistake, though, that any extension of time past the 180 days has got to be something which is reasonable. This can't be a laxity or just a falling behind, because, well, nothing is going to happen to change our attitude that these plans and specifications and improvements

must take place. Sure, if there is a bad strike or an act of God or something, yes, we understand this. But this must be done and any laxity or recalcitrance on the part of Holly will be viewed just that way.

SENATOR VANDERPOOL: I understand that, Mr. Chairman. I did want to say probably my biggest reason for being here would be a testimony of good faith in Holly and that we have a Water Quality Act of 1955 which is fine and dandy and it is all we have, actually, because we didn't legislate anything new this past time, but Holly has, without being forced to, of course, taken great steps in what they have actually turned into the Platte River, as you know. I can remember in the early fifties when I happened to be at a meeting where their representatives met with the Game and Fish people. It was generally agreed between them that there were certain things that would have to cease and it has been reported they did.

So they have been following along on an annual year-to-year program of doing everything possible to clean it up and I do understand that this just can't be a lackadaisical statement saying now we are not able to do this, because I would imagine that these things will have been complied with, if everybody works normally, by the time the campaign actually starts. I appreciate that.

Thank you.

MR. MONAHAN: Thank you, Senator.

MR. MARKEY: Mr. Chairman, I would like to add one more thing.

MR. MONAHAN: Mr. Markey.

MR. MARKEY: These are recommendations by the Federal Government to abate this pollution. Very shortly we would like to get together with Holly to discuss these recommendations and see if these are reasonable and if these can be accomplished by that time frame, that is before the sugar beet campaign. At this point these are recommendations and they are subject to additional discussion with everyone concerned. We would expect on those actions that we are recommending that we feel that can be accomplished that the company would undertake very expeditious measures to accomplish this. In other words, the company would have to go into a crash effort to accomplish this. But we are not about to impose any unreasonable requirements in this case.

MR. MILES: Let me answer that. In addition to the clarifier installation, which was already being scheduled and in process, we have gone into a very crash program in an effort to satisfy the requirements that have been outlined mostly on the basis of stepping up our program by approximately a year.

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Some of the equipment we physically cannot get. As you know, we cannot get a cooling tower between now and the time we start up, there is no way. However, if the railroad strike permits, and providing the equipment manufacturer continues to function, which we think he will, we should be able to get sufficient equipment to meet the program we have outlined and we will do that. And I might add at considerable expense, because this is one of the areas that we are concerned about. Were we able to schedule it on a logical systematic arrangement, the expense would be more normal. Under this program it is considerably greater than we would have anticipated having to do, but we are doing it. So we are taking these steps and we are making every effort to satisfy what we identified in our statement. Given a good expeditious supply of equipment we probably will make it, but there are possibilities we could not.

MR. WILLIAMSON: May I have a question since recommendations come up here?

MR. MONAHAN: Yes, Mr. Williamson.

MR. WILLIAMSON: On what basis did you arrive at these effluent standards? In other words, what is the reasonableness and the justification of a pretty stringent effluent standard?

MR. DAHL: I think if you look into the document which the Beet Sugar Foundation itself put out you will find

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that 17 of the 59 plants in the country reportedly now have zero discharge of BOD per unit.

MR. WILLIAMSON: I will grant you--

MR. DAHL: I would say that says for itself that even industry acknowledges that it can be done. I think Holly itself will say that it has systems in the country where it is accomplishing these things.

MR. MILES: These are completely closed systems you are referring to. We also have a system that goes into a sanitary district, a factory that discharges that way, that is one of the 17.

MR. DAHL: The technology is there.

MR. MILES: One of the 17. You wouldn't want us to discharge into the sanitary system in Torrington, would you?

MR. DAHL: No--

MR. WILLIAMSON: We are not questioning that this is possible. We are talking about this particular discharge and I say this is where you get trapped with an effluent standard. You say we are going to treat everything to this degree whether it needs it or not.

MR. MARKEY: You should be able to meet that value or Holly should, I say.

MR. WILLIAMSON: Grant you, they can.

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MR. MARKEY: If--

MR. WILLIAMSON: But I am saying,Why?

MR. MARKEY: This is a result of providing that type of treatment.

MR. WILLIAMSON: But where is your justification that says this degree of treatment is needed to maintain good quality of water in that stream?

MR. MARKEY: If you meet that particular criteria you will not violate the water quality criteria established on the North Platte River.

MR. WILLIAMSON: The only thing that is being violated right now is the coliform standard.

MR. MARKEY: Right. Now, if you can show this, that a higher parameter should be set and yet still meet the water quality standards in the North Platte River, this is open to negotiation.

MR. WILLIAMSON: You have got your criteria way above what is maintaining good quality water in the river.

MR. DAHL: I think this is something that will be involved, and which the Denver people are here with their permit application and assessment of the characteristics of the effluent, that this is consistent--which we discussed with them--consistent with what we would accept as being permitted conditions

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which would not then constitute refuse matter being discharged.

MR. WILLIAMSON: I think you have got a pretty hard job. You have still got to get back to proving degradation, whether it is under the Corps permit or whether it is under any other thing,you still have to prove degradation and I think the North Platte--

MR. MARKEY: Don't you think it has been proved?

MR. WILLIAMSON: Only in bacterial quality, period. Bacteria is all we are talking about. Yet you are coming up with recommendations on BOD's and on solids and other things. We went through this in three conferences. We agreed that we had solved the problems. Our goal at the start of the conference was reduce the BOD loading to 8 pounds per ton of beets sliced. At that time when we started it was somewhere up around about 35 pounds. We reduced it to 3.5, way below our goal. And I would say that even when that river was receiving BOD at 35 pounds per ton of beets processed there was no depletion of oxygen in this stretch between here and Bridgeport.

MR. DAHL: I think that which was required in the early sixties is not necessarily consistent with what we would want to accomplish now.

MR. WILLIAMSON: I am still saying you have got to prove why it is necessary.

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MR. MONAHAN: All we have to prove is that they violated the water quality standards of Nebraska or that they are dumping refuse into the stream, a navigable river. That is all we have got to prove.

MR. WILLIAMSON: You have got to prove, I think, the refuse--what are we identifying as refuse? Soluble material?

MR. MONAHAN: The United States Supreme Court has identified refuse under the act to mean domestic waste through a sanitary treatment plant.

MR. DAHL: That is the exclusion.

MR. WILLIAMSON: I don't know, it doesn't sound like we are talking about beet sugars.

MR. MARKEY: No, that is the exclusion.

MR. MONAHAN: That is the exclusion.

MR. MARKEY: Other than that.

MR. MONAHAN: Other than that it is refuse.

MR. DAHL: The 1966 Supreme Court decision said that refuse constituted all foreign substances and pollutants except for municipal sewage. I think that is a pretty clear definition of what refuse is.

MR. WILLIAMSON: That is a very broad field if they are going to use that definition.

MR. MONAHAN: It is a pretty broad field, sure. The

only people who are exempt are the municipal treatment plants. That is what I said at the beginning of this hearing. Mr. Miles asked me about that and these are recent decisions which have narrowed the construction of the particular statute involved.

MR. WILLIAMSON: Then this is not giving any consideration to any effect on quality, then, period, whether it has any effect on quality or not? It is just coming under the name of refuse, period, and quality will no longer be considered?

MR. MARKEY: Of course quality is the major consideration.

MR. MONAHAN: Surely.

MR. WILLIAMSON: This is what we are arguing at this point, that quality is being maintained at a much higher loading than what you are specifying. And they are going to come back and say, well, it is refuse, and it isn't affecting the quality.

MR. MARKEY: I don't quite see your argument.

MR. WILLIAMSON: Well, I am saying you are putting some pretty heavy cost on somebody here to meet a 30 milligrams per liter BOD when the river is capable of taking a much higher BOD loading without any degradation, so how do you justify it?

MR. DAHL: The things that will be accomplished in

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getting down--you are talking strictly summer capacity, but the things that will be accomplished in getting down to these levels will be a significant reduction in the possibility of these organisms as well. You are talking about removing solid material, removing soluble material, you are talking about also a significant reduction in organisms themselves.

MR. WILLIAMSON: The same thing can be obtained by chlorination.

MR. DAHL: That is not to say that they can't grow back again, the surface of the particles or organisms; that is not true, I don't believe.

MR. WILLIAMSON: If we are just talking about meeting a coliform standard, this could be done by disinfection.

MR. MARKEY: By chlorination, you say? That is subject to debate.

MR. DAHL: I think we are getting into the basis of just philosophical differences we may have here.

MR. WILLIAMSON: That is my argument, you are coming up with an effluent standard that is strictly based on philosophy and we are going to treat all wastes to the highest degree possible without any consideration of the stream we are discharging it into, which I don't buy.

MR. MONAHAN: Mr. Timm.

General Discussion

MR. TIMM: It would appear to me that one of the reasons--

MR. MONAHAN: Give your name and identification.

MR. TIMM: I am Mr. Timm with the EPA, Region VIII, out of Denver.

One of the reasons behind these requirements is that every State just about has got a requirement within their standards that all industries are supposed to have the industrial equivalent of secondary treatment. We read this as being the same kind of treatment a municipality should have, which is in the range of these 30 milligrams per liter BOD solids. That is secondary treatment for a municipality, what we feel is adequate, so industry should be able to do the same thing, and this, I think, is one of our big bases on this.

MR. WILLIAMSON: Good philosophy, but still has to be justified.

MR. TIMM: It is in your standards.

MR. WILLIAMSON: No, it isn't. I know my standards and it is not in my standards.

MR. TIMM: It is in most of them and we are applying this across the Nation.

MR. WILLIAMSON: I know you are, and I am still arguing with you too.

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MR. MONAHAN: Yes, sir.

MR. SIMONS: I wanted to ask a question here.

Mr. Dahl, the standards that you have read to us where we are talking in terms of numbers of coliform organisms and numbers of milligrams per hundred milliliter, now, the thing that is in violation here is the Nebraska standards based on this type of thing, isn't it?

MR. DAHL: Right, as well as the Refuse Act we are talking about of 1899.

MR. SIMONS: What I want to ask, is your recommendation based on the Nebraska standards or not?

MR. DAHL: Our recommendation is both based on protecting the quality, the interstate quality, of the waters as well as our authority in defining on the Federal level what constitutes refuse for our considerations.

MR. SIMONS: Is your recommendation more or less stringent than the Nebraska standards that we are talking about?

MR. DAHL: The recommendation that we have made will accomplish the meeting of the Nebraska water quality standards.

MR. SIMONS: And more?

MR. DAHL: Is there something wrong with enhancing the water? That is one of our basic--

MR. SIMONS: The only thing is we keep referring to

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legality here and the illegal thing is apparently the Nebraska standards. Now, a standard, as you and I and everybody knows, is just something that can be changed. We may make these more or less stringent tomorrow.

MR. DAHL: There are provisions within the water quality standards set up for revisions. However, at the present time these are the Federal and State approved water quality standards of Nebraska.

MR. SIMONS: Yes, but what I am saying, is the thing you are proposing to impose on these people 180 days from now more stringent than the law that is being violated that has brought the whole thing into question? This is what I am asking you.

MR. DAHL: The State of Nebraska has a secondary treatment requirement. This is consistent with the secondary treatment of their wastes.

MR. SIMONS: But in terms of milligrams per volume of water and in terms of numbers of coliform organisms per volume of water--

MR. DAHL: I might add, I think this will probably clarify part of what you are saying too, we have sent a letter to the Nebraska pollution organization which is consistent with what we are saying here as far as our feelings on this industry

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and what the effluent characteristics should be. They requested that we do this. We provided them with comments on this and they are consistent with what we are talking about here.

MR. SIMONS: In other words, are you saying that your recommendation and the violation of the Nebraska standards are the same thing? Is this what you are saying? I am talking in terms of--let's just pull a figure out and let's say 100 colonies per sample represents Nebraska's standards and you represent--

MR. DAHL: Well, see, generally what they would do is require a disinfection requirement as opposed to a specific number of organisms. We have not as well listed a specific number of organisms type thing. We are talking organisms, we are generally not talking a standard related specifically to the numbers with the discharge. We are generally talking with the numbers in water quality standards, we are talking about in the stream, and that is--

MR. SIMONS: You are talking about two things, aren't you? You are talking about the number of bacteria per colonies that you can grow out of a certain valuable water and you are talking about total solids that are contributed by this plant to the stream, aren't you? You are talking about two things? And when your recommendations come back you said that procedures

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should be carried out to--I don't remember the exact figures--but not to exceed a certain number of milligrams of BOD and suspended solids and not to exceed a certain number of coliform bacteria per volume of water. This was the standard you read back, wasn't it, that you were recommending?

MR. DAHL: There wasn't a specific number on the organisms as such. I said it was a requirement of disinfection and this, like I say, talking in terms--it is very difficult when you get into the area of talking on a given discharge of a given number of organisms. Generally you figure in terms of effective disinfection.

MR. SIMONS: My original question, though--I ask you, if you will, to answer me yes or no--are the recommendations that you made that these people are supposed to meet, the effluent standards, more or less stringent than the same recommendations that would be within the minimum requirement of the Nebraska law? Yes or no.

MR. DAHL: I think I have clarified that by saying that we have provided to Nebraska upon request our feelings on this specific industry as far as--

MR. SIMONS: Well, pardon me, but I am not really interested in your feelings. I just want to know--

MR. DAHL: You are talking two different types of

standards. We are talking water quality standards within the stream on the one hand and we are talking about treatment to accomplish those kind of standards, and within the requirement that Nebraska has relating to secondary treatment we feel this is consistent with what would be required of that industry to accomplish what we are talking in terms of secondary treatment, industrial equivalent to secondary treatment.

MR. SIMONS: Let's not pursue it anyway. But I understand you are a sanitary engineer, is that right?

MR. DAHL: That is right.

MR. SIMONS: All right. Have you read the proposals of Mr. Miles? Are you familiar with his proposal of what they propose to do within the next year?

MR. DAHL: Yes. Yes.

MR. SIMONS: Now, do you feel that what he proposed to do will accomplish the things that you propose to get accomplished in terms of--

MR. DAHL: I think, yes, I believe that.

MR. SIMONS: All right.

MR. DAHL: I think like Mr. Markey said, we are going to have to get together and talk specifics, you know, on our specific recommendations as far as numbers, but the basic program that they have outlined I think is consistent with what we

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are requesting.

MR. SIMONS: O. K. Then just one more question. Suppose they put into effect as rapidly as they can and with your acceptance all the changes that he has proposed to make and then it doesn't meet the standards.

MR. DAHL: I believe it will.

MR. SIMONS: Well, let's suppose it doesn't. History is chock full of times when it didn't. Then does he get another 180 days to meet them?

MR. DAHL: I think we are talking theoretical things on the one hand.

MR. SIMONS: Yes.

MR. DAHL: But from the practical standpoint the program they will undertake, if it is consistent with what we are recommending here, will accomplish the abatement of what we feel is their water pollution problem.

MR. SIMONS: I don't think that is right.

MR. DAHL: From a practical standpoint I don't think you are thinking in terms of another notice right following this one. We are saying this is the agency who would initiate this.

MR. SIMONS: This is all I am trying to get.

MR. DAHL: Yes.

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General Discussion

MR. SIMONS: These people, this is what we are trying to assure, what Mr. Vanderpool said, our assurance that these people get a reasonable chance to do what they can do.

MR. DAHL: I think there is no question but what this is going to take place. I think historically we have gone out of our way to accommodate programs for abatement facilities. This hasn't always been a two-way street, but I think there is no question but what we recognize any extraneous circumstances that come up and we will in this case as we have in other cases.

MR. MONAHAN: I think Senator Vanderpool covered that question a little earlier. Sure, if something happens, if it doesn't work, if they will let us take a look at it, sure, we are not going to say, O. K., you are going to Federal court tomorrow. That is the answer to the whole thing.

MR. MARKEY: Mr. Miles has a question.

MR. MILES: Let me ask a question. Tom, did you say that you had proposed standards to the State of Nebraska for the beet sugar industry?

MR. DAHL: We were requested by Nebraska to provide our ideas on what we would consider an acceptable effluent concentration.

MR. MILES: Are there such standards for the beet sugar industry?

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MR. DAHL: General standards, you mean?

MR. MILES: Yes.

MR. DAHL: No, not that I know of.

MR. MILES: Has the beet sugar industry been involved in developing any such standards?

MR. DAHL: I think, like I pointed out, even your Beet Sugar Foundation report, the technology is there for doing virtually anything you want in treating these wastes. We feel that what these numbers here reflect is what is both possible and needed, and--well, I say, we are going to be consistent with the others as well as we are consistent with you, both in, you know, actions within the Federal Water Pollution Control Act or within the permit system that we are talking about. Basically we are talking about permit system with 1899.

MR. MILES: While Chris is here, will the permit system be dependent upon the effluent standards you are developing?

MR. DAHL: The permit that will be issued or will possibly be issued to, for example, your corporation will be conditioned with the requirements of whatever we finally come to within this action.

MR. MILES: That is this action right here?

MR. DAHL: And what we are setting forth here is consistent with the approach we will take for the industry in

general as far as requirements go.

I think maybe you would like to say something, Chris, as far as--is this not the case?

MR. TIMM: Well, yes, I would say this is the case, that every sugar beet plant in the country will be judged or the permits will be issued on the numbers that we are quoting here or the effluent standards that we quoted here, and changes will be made as necessary or were necessary to protect water quality. There are places in the country where these numbers are not enough to protect water quality and we realize this, but the numbers we put out are what we feel can be achieved by industry reasonably and yet we know it is not enough in all cases, so we are going to be tough where we need to be.

MR. MONAHAN: Mr. Williamson.

MR. WILLIAMSON: And as I understand, the permits will be issued not on the basis of whether in compliance with water quality standards but whether you are providing X degree of treatment whether the treatment is needed to meet the water quality standard or not?

MR. MARKEY: It will be tempered by the water quality standards, no question about it.

MR. WILLIAMSON: I mean as the law is written, as I read it, they ask us whether or not they are violating water

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quality standards period. They don't say whether you are treating it or not treating it. Is it interfering with water quality standards. So here we are bringing in another whole area of, well, we are not looking at water quality standards, we are looking at how much treatment you are providing. I suspected this way, way back. I just wanted somebody to say it. But the law says are you violating a water quality standard.

MR. MARBY: Well, if you look at water quality standards, water quality standards delineate uses, they have a plan of implementation, they also specify water quality criteria on a stream. It is our view that these specific water quality criteria are not necessarily indicators of pollution. You can have pollution in a stream and yet be in compliance in all these normal water quality criteria and additional treatment would be needed to remove these substances, keep them out of the stream.

MR. MILES: How does someone plan to accomplish what is required to meet the permit?

MR. DAHL: Like he said, this will--you know from our dealings right here today what our feelings are going to be as far as the permit goes. Any permit that will be issued will be conditioned with the implementation of what we feel is necessary to constitute a discharge that would be acceptable within

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the realms of the definition within the Refuse Act.

MR. MILES: Fine. Now, if I understood Bob correctly, what you said was that if at a later date that doesn't necessarily meet what you think it should, then the permit could be changed, is that correct?

MR. DAHL: I think this goes back to--like, for example, Chris said, obviously there are some small streams, especially in the country, which even given this type of treatment which is currently available on a practical or reasonable level, that there are certain streams which perhaps could not even take these kind of pollutants in them, these kind of levels in them, and in those cases if someone were to discharge to that type of stream they would have to provide additional treatment in a--

MR. MILES: Conversely, in support of Mr. Williamson, conversely there are streams that could accept a great deal more?

MR. DAHL: If you talk strictly in terms of diluting it out to meet a water quality criteria.

MR. MONAHAN: I think we are at the point where we can sum this up. I will go through Mr. Miles statement with the help of Mr. Markey and Mr. Dahl and try to pin down just what treatment they are talking about.

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Summary

Mr. Miles, as I understand your proposal, and also looking back on our informal conference we had in Kansas City, Holly Sugar proposes to separate your condenser water from your transport water flume, am I correct in this?

MR. MILES: That is correct.

MR. MONAHAN: And that you will have a tight recycle from your clarifier?

MR. MILES: That is correct.

MR. MONAHAN: And that any--you will have a lagoon overflow from your clarifier?

MR. MILES: That is correct.

MR. MONAHAN: Now, Tom, aren't these the three basic things that we are asking for in this particular case?

MR. DAHL: Essentially, with the addition of the cooling water. I don't think you mentioned that, the cooling water.

MR. MILES: That is next year.

MR. DAHL: Which we have acknowledged in our requirements. Obviously you can't just put a structure like that in, but--

MR. MONAHAN: Cooling tower?

MR. DAHL: Yes, cooling device. You are using cooling tower?

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MR. MILES: Cooling tower.

MR. MONAHAN: And that will be in when, do you know about?

MR. MILES: Before our 1972 operating season.

MR. MONAHAN: As to separating the condenser water from your transport water flume, when will this be accomplished or has it been accomplished?

MR. MILES: This is in the process of being accomplished and this is one of the points that I identified that if the equipment arrives and if we can get it there in time, because of rail strikes, we will have it installed. We have it laid out, designed, we know what we are going to do, but the equipment has to get there, and if it gets there we will have it in before this operating season.

MR. MONAHAN: If everything falls in place--

MR. MILES: Right.

MR. MONAHAN: --you will have it before you start up this campaign?

MR. MILES: Providing it all gets there, that is right.

MR. MONAHAN: As to a tight recycle from your clarifier, is your clarifier in now?

MR. MILES: They poured 94 yards of concrete yesterday.

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So it is basically in.

MR. MONAHAN: All right. That will be completed--

MR. MILES: Yes.

MR. MONAHAN: --prior to your campaign?

MR. MILES: Yes.

MR. MONAHAN: And the lagoon overflow from the clarifier?

MR. MILES: We are at the present time--here again there has to be equipment to get the overflow from there to the lagoon and that is 3,000 feet of pipe and this has to come by rail or horseback or whatever, but if that gets there we will get it installed. There will be lagoons.

MR. MONAHAN: All right. Now, as I understand it, correct me if I am wrong, but the only recommendation we have made at this time that you can't meet, providing everything falls in place right, before this next campaign is your cooling tower?

MR. MILES: Cooling tower is scheduled for next year. That is next year.

MR. MONAHAN: That is what I say, it will have to come next year.

MR. DAHL: Their program is consistent with what we recommended. We recommended that prior to the '72-73 campaign

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that this be installed.

MR. MONAHAN: Correct.

MR. DAHL: So that is consistent.

MR. MONAHAN: Bob, do you think we need another meeting with Kelly on this?

MR. DAHL: I think we could get together and discuss the mechanics of it. Obviously there are some finer points in this, but the basic program--

MR. MARKEY: I think the basic program we have agreement on.

MR. MONAHAN: It looks good.

MR. MARKEY: I can't see any other items.

MR. MONAHAN: It looks good.

MR. MARKEY: We would like to meet with you once more if we could.

MR. MILES: What time? When? Kansas City, St. Louis?

MR. DAHL: Why don't we just contact you on that?

MR. MARKEY: Why don't we contact you in the next few days?

MR. MILES: Fine.

MR. MONAHAN: We will write you in the next two weeks on it.

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MR. MILES: Fine. Will you include the permit at the same time? (Laughter.)

MR. MONAHAN: That is the Corps of Engineers job.

MR. DAHL: You have to talk to Chris Timm about that and Herb Dickstein.

MR. MARKEY: That is a ticklish one. They are not even in operation.

MR. MONAHAN: Mr. Evans.

MR. EVANS: The Torrington problem seems to be solved, particularly with the permit aspects of it. I am concerned about permits with these plants that do not have closed systems.

MR. MONAHAN: Do not have what, closed systems?

MR. EVANS: Closed systems like the 17 out of the 53 plants. What happens to those plants this year?

MR. MILES: Other than the 17?

MR. EVANS: Other than the 17.

MR. MONAHAN: Well, I would imagine that first they will send in a permit application, this is the first thing.

MR. EVANS: Yes, we have done that.

MR. MONAHAN: All right. Secondly, in order to get a permit, the permit will be conditioned on several things happening, clarifier being installed, lagoon systems, so on and so

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forth.

MR. EVANS: At all plants. I am just concerned with Mr. Dahl's statement, and it is quite true that they have the power to shut us down tomorrow with our other plants because we do not have a permit. We have applied for a permit, but--

MR. MONAHAN: That is right.

MR. EVANS: --obviously we can't get one until the Federal Government grants the permit. It is as if to say we can fine you because you don't have a permit and yet we, the Federal Government, are the only ones that have the authority to grant the permit. What does happen this year to the other plants?

MR. MILES: Our concern is with the operating season.

MR. MONAHAN: Well, I think the other plants should meet with EPA and the Corps and sit down and talk this out and find out just if they are proceeding in good faith.

MR. MILES: In all cases we have been working with the State departments. We have been working with all the States closely wherever we are involved and our schedule is based on what we understand with the States, and now if all of a sudden October 1 of this year we come in with a restriction, we need to know what effect this has.

MR. MARKEY: I think, if I could speak, with your

permit application if you just attach a supplementary sheet to let the EPA know what your schedule is, this may be all that is needed.

MR. EVANS: You have a chicken and egg proposition. We need to know, of course, standards.

MR. DICKSTEIN: Irv Dickstein, EPA, Denver. I can assure you that if there are any problems with issuing permit, the EPA, the State involved and the particular industry will meet together to discuss a feasible implementation plan. We do not expect miracles overnight. And we will devote every effort to work out a feasible implementation plan.

MR. MONAHAN: Mr. Dickstein is Chief of Enforcement, is that right?

MR. DICKSTEIN: Enforcement Division, Region VIII.

MR. MONAHAN: Which includes Denver, Colorado, and the other western States?

MR. DICKSTEIN: Yes.

MR. MONAHAN: I think we can bring this to a conclusion now.

I would like to thank Holly Sugar for being here today, Mr. Williamson for being here and his comments, Mr. Starr, Senator Vanderpool, Representative Simons, and the other people who had comments to make. I think we have had a

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productive meeting. I feel sure Holly Sugar will abide by the recommendations that we have made and I think that Mr. Miles' statement was very much to the point. I think we can work this out pretty well together. Thank you very much.

The conference is at an end.

(ADJOURNMENT)

(Exhibits A, B, and C, which were read into the record, are attached to the ribbon copy of this transcript, which is on file with the EPA in Washington, D. C.)

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REPORTER'S CERTIFICATE

I, Virginia H. Rankin, Certified Shorthand Reporter, hereby certify that the proceedings had in the matter set forth in the caption page hereof were reported in shorthand by me, afterwards transcribed, and that the foregoing pages numbered 1 to 91, inclusive, contain a true transcript of said shorthand notes.

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Certified Shorthand Reporter

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